

## DOG EXCREMENT COLLECTOR

This invention is intended for the practical and hygienic collection of dog excrement, so as to enable people to walk their dogs anywhere without requiring them to bend down to push, sweep or scoop the dog waste.

5           The principle is to collect the excrement as soon as the dog eliminates it, instead of leaving it to pollute the streets.

The instrument is lightweight, resistant, disassemblable and inexpensive.

The invention consists of four separate elements (1, 9, 16, 26 shown in figures 1, 2, 3 and 4) combined to form the instrument.

10           Figure 1. The shaft (1): hollow, with a diameter of 15 mm (can optionally be smaller), made of a lightweight (plastic, pvc) material, resistant, rigid and biodegradable, contains a rod (2) molded in one piece (A and B). At one end (A), a portion that is five centimeters long and 14 mm high acts as a piston actuated by a pull element (3) screwed into said piston and moving in the slot (5). At the other end of the rod (2), two male clip portions are attached to it (4, figure 1), and can be connected to the female portion of the clip (24, figure 3) enabling the rod (17, figure 3) to move over the frame (16, figure 3). A slot (5) in the rod (1, figure 1), which is 50 mm long and 5 mm wide, and at the two extremities with a groove (6) that enables the rod to be locked in the open or closed position (17, figure 3). The pull element (3) screwed into the piston A slides along the slot (5) enabling the rod (2), which is attached to it to move the rod (17, figure 3). The piston, made of the same material as the assembly, has a diameter that enables it to slide into the rod (1) without friction. At the two ends of the rod (1), placed 20 mm from the end, two male portions of a clip are attached (7). The invention also enables the instrument, which is secured to the leash by two attachments, to be used with one hand. One attachment (8) is on the rod (1), 400 mm from the end next to the piston of the rod (1). It  
25           consists of a Velcro strip that is long enough to surround any leash model on the market. The

other attachment (10, figure 2), is a ring that opens and closes under simple pressure, and can be attached to the handle of the leash, which will then be secured to the handle (9, figure 2). The elements of figure 1 (2 and 3) can be disassembled and changed, as can the rod (1) enabling parts to be replaced without having to change the entire instrument.

5           Figure 2. The handle (9), made of the same material as the rod (1, figure 1), is 13 cm long and 4 cm in diameter, with finger imprints molded on one side so as to ensure a good grip. The ring (10, figure 2) will be attached to the opposite side. The hollow handle has a base at 100 mm, with the remaining 30 mm receiving the female portion of the clip (11), which is fitted onto the rod (1, figure 1). The hollow portion receives an extra sack (12). In its upper portion,  
10   the handle closes with a flap member (13) that moves over a hinge (14), closing with a clip (15). The handle (9) is also replaceable.

          Figure 3. The frame (16), made of the same material as the rod (1), consists of one piece (18, 19, 20, 21) that is 10 mm in diameter, forming an area of 170 mm on the outside ending with a 30-mm long bend receiving the female portion (25) of the clip connecting it to the rod  
15   (1, figure 1). The space between the two female portions makes it easy to clip tightly onto the rod (1). The rod (17) with the same diameter as the frame (16) slides on (18 and 20) through two rings (23) of the same material as (1, 12, 16) and attached at each end of (17) by rivets closing a collar integral with the ring. The two rings (23) are each mounted on one of four hooks (22). When the rod (2) is actuated by the pull element (3), it opens and closes the  
20   rectangle (17, 18, 19, 20) opening and closing the sack (26) located inside said rectangle.

          The interior free space for the sack between (17) and the rod (19) is 140 mm. The space between the two arms of the frame (18 and 20) is 150 mm. Four small “T”-shape hooks with a rounded head (22) vertically screwed, 2 at the ends of (19) and 2 at the ends of (17) on the two rings (23), enable the sack (26) to be attached. Attached to the rod (17), a tube molded thereto  
25   has two female portions (24) of a clip receiving the male portions (4) connecting (17) to (2).

The two female holes of this clip can be extended so as to enable the rod (2) to rotate when the pull element (3) is placed in the grooves 6.

Figure 4. The sack (26) is made of a waterproof biodegradable flexible material (plastic). With a rectangular base (140 x 150 mm), when hooked on (16), it is 150 mm high, with a 50-mm flap over the edges of (17, 18, 19, 20) so as to always prevent the instrument from coming into contact with the street or the excrement. Under the flap, on the right-hand side, facing the user, a self-adhesive patch with a plastic tie (28) enables the sack (26) to be hermetically sealed before being thrown away. The sack is produced with four holes (27) placed over the hooks (22) making it easier to for the sack to be placed and held during use. A cut (29) is made in the flap so that the sack (26) can be placed on each side of the rod (2 connected to 24).

The invention, which is easy to use, lightweight and inexpensive, is a practical solution to the hygiene problem presented by our canine friends everywhere they go.